TABLE 45

Federal obligations for applied research in engineering, by agency and detailed field: FY 2019
(Dollars in thousands)

Agency	Total	Aeronautical engineering	Astronautical engineering	Chemical engineering	Civil engineering	Electrical engineering	Mechanical engineering	Metallurgy and materials engineering	Other engineering
All agencies	11,661,360.2	1,128,215.4	820,974.5	379,215.4	554,753.9	751,156.5	526,731.2	619,747.1	6,880,565.9
Departments									
Department of Agriculture	45,367.8	0.0	0.0	260.8	0.0	0.0	0.0	0.0	45,107.0
Agricultural Research Service	4,652.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,652.5
Forest Service	5,740.5	0.0	0.0	260.8	0.0	0.0	0.0	0.0	5,479.7
National Institute of Food and Agriculture	34,974.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34,974.8
Department of Commerce	236,435.1	0.0	0.0	293.6	58,039.5	90,302.4	2,516.4	47,252.2	38,031.0
National Institute of Standards and Technology	219,981.1	0.0	0.0	293.6	52,603.5	79,284.4	2,516.4	47,252.2	38,031.0
National Oceanic and Atmospheric Administration	8,554.0	0.0	0.0	0.0	5,436.0	3,118.0	0.0	0.0	0.0
National Telecommunications and Information Administration	7,900.0	0.0	0.0	0.0	0.0	7,900.0	0.0	0.0	0.0
Department of Defense	2,462,064.2	577,273.3	87,003.5	88,572.0	21,819.4	490,755.3	336,914.5	340,223.1	519,503.0
Defense Advanced Research Projects Agency	295,411.2	40,162.3	0.0	13,306.7	0.0	62,663.5	8,830.1	16,339.4	154,109.3
Department of the Air Force	1,030,812.6	402,726.5	67,377.8	2,796.9	11,973.2	213,652.4	67,135.1	187,381.8	77,768.8
Department of the Army	666,416.7	85,059.3	19,035.6	61,902.7	9,846.2	45,839.0	234,898.4	53,284.9	156,550.7
Department of the Navy	353,375.1	46,318.2	0.0	0.0	0.0	106,725.2	16,972.4	79,787.1	103,572.3
Other defense agencies	116,048.6	3,007.0	590.0	10,565.7	0.0	61,875.3	9,078.7	3,430.0	27,501.9
Department of Energy	4,748,268.4	0.0	50.0	247,507.2	100,000.0	108,263.5	69,642.6	204,391.7	4,018,413.4
Advanced Research Projects Agency—Energy	125,171.4	0.0	0.0	28,789.8	0.0	18,433.2	57,806.9	14,683.2	5,458.3
Electricity Delivery and Energy Reliability	72,345.0	0.0	0.0	0.0	0.0	72,345.0	0.0	0.0	0.0
Energy Efficiency and Renewable Energy	1,270,334.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,270,334.0
Fossil Energy	300,000.0	0.0	0.0	200,000.0	100,000.0	0.0	0.0	0.0	0.0
National Nuclear Security Administration	2,483,409.7	0.0	50.0	105.0	0.0	150.0	0.0	169,183.8	2,313,921.0
Defense Programs	2,482,704.7	0.0	0.0	0.0	0.0	0.0	0.0	169,183.8	2,313,521.0
Office of Defense Nuclear Nonproliferation	705.0	0.0	50.0	105.0	0.0	150.0	0.0	0.0	400.0
Nuclear Energy	378,272.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	378,272.7

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Agency	Total	Aeronautical engineering	Astronautical engineering	Chemical engineering	Civil engineering	Electrical engineering	Mechanical engineering	Metallurgy and materials engineering	Other engineering
Office of Cybersecurity, Energy Security, and Emergency Response	39,033.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39,033.2
Office of Science	79,702.4	0.0	0.0	18,612.4	0.0	17,335.3	11,835.7	20,524.7	11,394.3
Department of Health and Human Services	1,038,797.6	0.0	0.0	0.0	0.0	0.0	200.0	8,032.8	1,030,564.8
Agency for Healthcare Research and Quality	803.0	0.0	0.0	0.0	0.0	0.0	200.0	0.0	603.0
National Institutes of Health	1,037,994.6	0.0	0.0	0.0	0.0	0.0	0.0	8,032.8	1,029,961.8
Department of Homeland Security	88,130.4	4,684.4	0.0	2,409.4	2,971.0	15,543.5	61,952.1	0.0	570.0
Cybersecurity and Infrastructure Security Agency	1,450.0	0.0	0.0	0.0	0.0	0.0	880.0	0.0	570.0
Science and Technology Directorate	82,255.2	4,684.4	0.0	2,409.4	2,971.0	12,475.5	59,714.8	0.0	0.0
U.S. Coast Guard	4,425.2	0.0	0.0	0.0	0.0	3,067.9	1,357.3	0.0	0.0
Department of Housing and Urban Development	744.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	744.4
Department of the Interior	11,496.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11,496.0
Bureau of Reclamation	8,257.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8,257.0
Bureau of Safety and Environmental Enforcement	3,239.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,239.0
Department of Justice	1,734.1	0.0	0.0	0.0	137.9	0.0	159.1	0.0	1,437.1
Office of Justice Programs	1,734.1	0.0	0.0	0.0	137.9	0.0	159.1	0.0	1,437.1
Department of Transportation	588,054.1	0.0	873.1	6,534.2	368,399.0	4,351.7	30,574.2	500.0	176,821.9
Federal Aviation Administration	107,862.7	0.0	873.1	6,226.2	100,763.3	0.0	0.0	0.0	0.0
Federal Highway Administration	414,879.6	0.0	0.0	0.0	253,583.8	0.0	0.0	0.0	161,295.8
Federal Railroad Administration	30,339.3	0.0	0.0	0.0	14,051.9	4,151.7	8,942.1	0.0	3,193.6
National Highway Traffic Safety Administration	21,132.1	0.0	0.0	0.0	0.0	0.0	21,132.1	0.0	0.0
Office of the Secretary of Transportation	8,210.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8,210.9
Pipeline and Hazardous Materials Safety Administration	5,629.6	0.0	0.0	308.0	0.0	200.0	500.0	500.0	4,121.6
Department of the Treasury	163.8	0.0	0.0	0.0	0.0	0.0	0.0	163.8	0.0
U.S. Mint	163.8	0.0	0.0	0.0	0.0	0.0	0.0	163.8	0.0
Department of Veterans Affairs	45,054.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	45,054.1

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Agency	Total	Aeronautical engineering	Astronautical engineering	Chemical engineering	Civil engineering	Electrical engineering	Mechanical engineering	Metallurgy and materials engineering	Other engineering
Other agencies									
Environmental Protection Agency	57,407.5	0.0	0.0	20,873.3	2,409.6	0.0	685.5	519.3	32,919.8
Federal Communications Commission	1,500.0	0.0	0.0	0.0	0.0	1,500.0	0.0	0.0	0.0
National Aeronautics and Space Administration	1,916,816.7	546,257.7	733,048.0	0.0	0.0	4,480.5	0.0	16,318.6	616,711.9
National Science Foundation	312,971.3	0.0	0.0	12,764.8	977.6	20,921.1	12,461.2	2,345.5	263,501.0
Nuclear Regulatory Commission	74,076.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	74,076.6
Tennessee Valley Authority	5,614.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,614.0
U.S. Postal Service	26,664.2	0.0	0.0	0.0	0.0	15,038.6	11,625.6	0.0	0.0

Note(s):

Because of rounding, detail may not add to total. Only those agencies and subdivisions that had obligations in variables represented by this table appear in the table. See technical table A-2 for additional notes associated with the agencies listed in this table.

Source(s):

National Center for Science and Engineering Statistics, Survey of Federal Funds for Research and Development, FYs 2019-20.